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(54) **Title: METHOD FOR TRANSMISSION OF AN E-DCH CONTROL CHANNEL IN MIMO OPERATIONS**

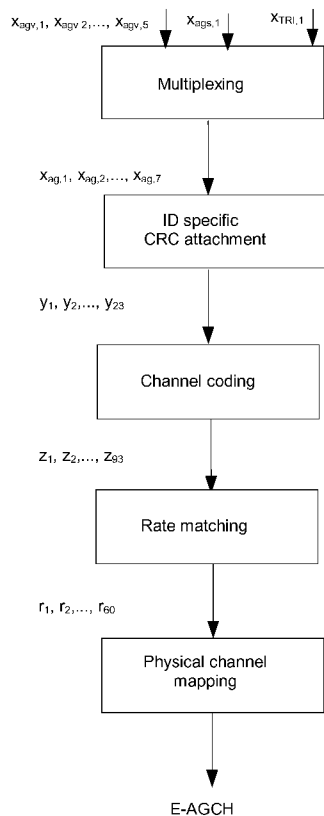


Figure 2

(57) **Abstract:** Systems, methods, and instrumentalities are disclosed for a wireless transmit/receive unit (WTRU) to determine rank, offset, or inter-stream interference control information, for example, which may be associated with uplink MIMO operations. A method to control a WTRU may include receiving a special E-RNTI that is associated with a channel. The channel may be associated with a rank indication. The channel may be an E-AGCH-like channel. The channel may have a similar encoding structure as an E-AGCH. The channel may be an E-ROCH. The channel may be received, and it may be determined that the channel is associated with the special E-RNTI. At least one of a rank or an offset may be determined, and the WTRU may be configured with the determined rank or offset. An inter-stream interference (ISI) offset may be received, for example, via RRC signaling, and may be applied to an uplink transmission of a primary stream.



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